# Dialogue &co – season 1 – episode 3: Perceptions of inflation

#### **VOICE-OVER**

Hello and welcome to a new episode of Dialogue &co, where we will discuss a subject that concerns us all on a daily basis: inflation. Not only inflation as measured by statisticians, but also inflation that we perceive, every day, often differently from one person to the next. Erwan Gautier, economist at the Banque de France and specialist in inflation perceptions and expectations, will be interviewed by Vincent Bignon on this high-stakes economic and political subject.

#### VINCENT BIGNON

Hello Erwan.

#### **ERWAN GAUTIER**

Hello Vincent. And thank you for your invitation.

## **VINCENT BIGNON**

Erwan, to set the scene, could you remind us what inflation is?

### **ERWAN GAUTIER**

Economic analysis defines inflation as the general increase in the price of goods and services. From a statistical point of view, inflation is measured independently by INSEE using hundreds of thousands of prices collected once a month across France. At shops, in supermarkets, wherever consumers make purchases. All goods and services consumed by the French are covered by these price quotes, whether they be goods purchased on a regular basis, such as petrol or food, or more infrequently, such as cars, furniture, clothing, travel, and finally regular expenses, such as rent, electricity, gas, public transport and telephone bills. Then, to obtain a measure of inflation, INSEE calculates the average price change over one year based on all these price data.

#### VINCENT BIGNON

How does this average take into account the fact that not all products have the same importance, the same weight in our budget?

# **ERWAN GAUTIER**

When calculating this average, INSEE will give a different weight to price trends for each product. This weight will correspond to what this product represents in the consumption basket of all households in France. To establish the weights for each product, INSEE will use detailed data measuring consumption by product for all households over the course of a year. It then determines the importance of each item in the overall consumption basket of French households.

#### **VINCENT BIGNON**

I sometimes hear this measure being criticised on the grounds that it's just an average that imperfectly represents individual perceptions. Is this true?

#### **ERWAN GAUTIER**

Yes, it's true, by construction. It's unlikely that any particular household's consumption basket will correspond exactly to the average basket. The rise in prices measured by inflation will therefore be different from what each one of us can experience. INSEE has made available on its website a simulation tool that enables you to calculate the inflation that corresponds exactly to your personal consumption basket. Via this site, you can change the weights used to calculate the price index and thus obtain your personal inflation. However, the aggregate inflation of the average consumption basket will remain an important indicator for steering the French economy as a whole, as inflation is what provides the objective signal of the speed at which prices are rising in the French economy as a whole. Thus, in November 2024, the latest available inflation figure shows that consumer prices in France have risen by an average of 1.3% since last year.

# **VINCENT BIGNON**

Erwan, when I talk to people, they often tell me that inflation is much higher than that measured and published by INSEE.

# **ERWAN GAUTIER**

Yes, there is sometimes a significant gap between inflation as measured by INSEE and the inflation that everyone can feel or perceive. In order to measure the inflation that households perceive, a certain number of surveys are regularly carried out among thousands of households. These surveys are conducted by INSEE, the Banque de France, the European Central Bank and the European Commission. And this is a significant measurement issue, because even if our perception of inflation is different from measured inflation, it can influence the economic decisions we make every day.

#### VINCENT BIGNON

What have you learned from these surveys?

# **ERWAN GAUTIER**

By analysing these surveys, we've come to realise that households, and that includes you and me, greatly overestimate measured inflation on average. For example, if we take the latest European Commission survey, households in the euro area currently perceive inflation to be over 10% on average, whereas in reality it's less than 2%. And this overestimation is not specific to Europe, it is not specific to France, it can be observed on average in just about every country in the world, although of course the extent of this overestimation may vary from one country to another, and it may also vary from one period to another. Inflation perceptions are said to be biased upwards on average. On a more positive note, we also learn, by analysing these surveys, that while households overestimate inflation on average, they generally have a good perception

of its trend over time: perceived inflation moves on average in the same direction as measured inflation. We have a better perception of the general movement of prices, we can perceive that prices are rising or falling, but we find it harder to give an absolute level to this trend in prices.

#### **VINCENT BIGNON**

But why are our perceptions systematically above the INSEE measure? Are we the problem?

#### **ERWAN GAUTIER**

Four main factors explain this gap between our perceptions of inflation, which by definition are subjective and quite personal, and an objective measure, the inflation measured by INSEE, which is actually a fairly complex measure, no doubt more complex than we imagine. The first factor is linked to the fact that inflation is measured for all products consumed, and that our perception of it is imprecise and incomplete. We often have a good perception of how the prices we're used to evolve, which may even give us the impression that we're able to properly assess inflation through our everyday purchases. But this perception is much more imprecise for other products, those we buy less frequently. For example, we notice that food prices are rising, and we tend to extrapolate this rise to the economy as a whole, whereas food expenditure is only one component of our consumption basket. Admittedly, food represents a large share of our expenses, but it's not the only one, it accounts for just under 15% of the average consumption basket. The weight we give to our daily purchasing experience will lead us to exaggerate the weight of our daily expenses, such as petrol, to the detriment of expenses that are less frequent but that can represent an equally significant weight in the budget. The cost of buying and maintaining a car, for example, if we continue with the car example.

A second major factor that explains our overestimation of inflation is that we remember price increases more easily than price falls. In reality, a significant share of prices falls every month. It is estimated that around 40% of price changes each month are price decreases. For example, the price of some of our subscriptions can drop, such as telephone subscriptions, but we tend to pay less attention to this type of regular payment.

#### VINCENT BIGNON

So we pay more attention to bad news than to good news. Inflation is measured as the change in prices over the past year, but is it that easy to remember exactly what the price level was a year ago?

## **ERWAN GAUTIER**

No, it's far from obvious. And this is the third factor explaining the gap between perception and reality. Often, we don't assess a price rise over exactly one year, but using other points of reference in time that may have had a greater impact on us in the past. Today, for example, we tend to think in terms of price trends since the start of the inflationary episode, and therefore over the last three years. This will lead us to overestimate inflation, which is measured over one year. More generally, we tend to believe that prices in the past were lower than they actually were. As a result, we also tend to overestimate price rises, even though we know exactly how

high prices are today. A typical example is the price of bread before the introduction of the euro. Today, according to INSEE, the price of a baguette of bread averages around EUR 1. However, for those who remember the changeover to the euro, we sometimes hear that a baguette was worth FRF 1 or 2 at the time, which means that today's price would be 3 to 6 times higher than prior to 2002. Hence a strong inflationary push since the introduction of the euro. However, according to average INSEE figures, a baguette just before the changeover was not worth FRF 1 or 2, but rather FRF 4.5. That's 70 euro cents. Its price has not increased by a factor of 3 or 6 over the last 23 years, but rather by a factor of 1.5, which ultimately corresponds to an increase of less than 2% a year, a figure that is close to the rest of the consumption basket.

#### VINCENT BIGNON

That's really interesting. For the fourth factor explaining the gap between perception and reality, I have understood that the prices of the goods in my consumption basket were corrected for the quality improvements the product had benefited from, is that correct? Why is that?

#### **ERWAN GAUTIER**

Yes, that's absolutely correct. The last factor explaining the overestimation of inflation has to do with our understanding of exactly what inflation measures. In fact, INSEE measures price trends at constant product and service quality. In other words, how many euros we have to pay to purchase a good or service whose characteristics are exactly the same from one period to the next. Inflation measures pure price variations. If, for the same price, you have access to greater service or a higher quality good, INSEE will consider that the price of this good or service has fallen, because you will be spending the same budget on a better service or a higher quality product than before. However, as households, we can find it difficult to distinguish between pure price variations and improvements to the product we are buying. For example, the smartphones or computers we buy today are much more sophisticated and offer greater service than ever before. So, when calculating inflation, the prices of computers and mobile phones have actually dropped in recent years, because their quality is higher than it used to be.

# **VINCENT BIGNON**

So I need to distinguish between price increases and service increases if I want to bring perceived inflation closer to inflation measured by INSEE. These factors that explain the gap between perceived and measured inflation are sometimes subjective. But does this vary from person to person?

#### **ERWAN GAUTIER**

Yes, there are very wide variations from one individual to another, because on average, we're not going to agree at all when it comes to our perception of inflation. Recently, last November, in November 2024, the Banque de France conducted a survey among 5,000 households, at a time when inflation was a little over 1%, as I said earlier. However, only a quarter of households believed that inflation at that time was below 2%. And at the same time, over 40% of households, almost half, perceived inflation to be over 10%, with frequent responses based on rounded numbers such as 10, 15, 20, even 30% or more. These high, rounded responses often

reflect in themselves a form of uncertainty about the level of inflation, or even a lack of knowledge about the order of magnitude of inflation in France. A final interesting fact about the differences in perception between individuals is that it is extremely rare to think that inflation can be negative even when it is very low.

#### VINCENT BIGNON

Okay, but what explains these very considerable differences in perception between households at a given point in time?

### **ERWAN GAUTIER**

Several factors have been identified to explain the systematic differences between households. The first is that each of us will have a very different purchasing experience. And this experience will then influence the information we use to form our perception of the economy as a whole.

#### VINCENT BIGNON

It's the famous extrapolation you mentioned earlier.

# **ERWAN GAUTIER**

Yes, it's easier to remember the price of goods we buy on a regular basis. But these items, whose price we know well, may differ from one person to another, depending on our purchasing behaviour and the shops we go to. In the United States, a study carried out by several researchers asked households what products came to mind when they thought of inflation. Men were more likely to mention petrol prices, while women were more likely to mention milk prices or bread prices. In a recent Banque de France study we carried out on the differences between men and women's perceptions of inflation, we found that, on average, women had a higher perception of inflation than men. This fact has been established in several other countries. However, we have shown that this gap can be explained by the still highly gendered division of domestic tasks within couples. Women are more often in charge of shopping. As a result, in recent years, they have been more exposed than men to price rises, in particular for food. And this will further influence their perception of inflation and explain the gap between their perception and that of men.

## **VINCENT BIGNON**

But beyond this day-to-day experience, isn't another factor the fact that we all have different life experiences in relation to inflation?

# **ERWAN GAUTIER**

Yes, some events are more significant than others, and can have a lasting effect on our perceptions of inflation. I spoke earlier about the impact on price perception of having experienced the changeover to the euro, so rather for the generation now over 40. Another example is Germany, where inflation perceptions remain higher in the former East Germany than in the former West Germany, more than 30 years after German reunification. A study has shown that German reunification created a major inflation shock for East Germans, and that this shock has an effect on their perception of inflation that persists to this day.

#### **VINCENT BIGNON**

What other factors can influence how we feel about inflation?

#### **ERWAN GAUTIER**

Another major explanatory factor we've highlighted is, of course, linked to our knowledge, our general attention to economic developments and our sources of information. Here too, our knowledge and attention can vary greatly from one individual to another. However, the more households have access to reliable, accurate economic information, the more likely they are to have inflation perceptions close to the objective measure.

Finally, a third factor is our overall confidence in economic institutions and in their proper functioning. Of course, this is an important factor from the point of view of the central bank, whose objective is to ensure that the value of money is preserved over time. Having the certainty that holding this money will enable me to consume the same quantity of goods tomorrow. In a survey we carried out in 2023, we showed that households with a high or fairly high level of confidence in the Banque de France's actions, as well as in the currency, had on average a lower perception of inflation than other households. And the gap was significant, in the range of 4 to 5 percentage points.

#### VINCENT BIGNON

Let's now try to understand how inflation perceptions impact monetary policy, interest rates and, more broadly, public policy. In what way are inflation perceptions important?

# **ERWAN GAUTIER**

Public policy, and monetary policy in particular, is concerned with inflation perceptions for two reasons. First, our perceptions of inflation can influence our economic decisions, as consumers and employees. If, for example, I perceive that prices are going to rise tomorrow, this may change my consumption decisions today. For example, I may decide to consume more today, when I believe prices are still low. On the contrary, I may save more if I believe my purchasing power is going to drop sharply because of inflation. Then, as we pointed out, confidence in the central bank's ability to stabilise inflation at a low level is important for overall economic stability. It is important for central banks to ensure that households and businesses have confidence in price stability and that its policy is well understood. Central banks' communication on their actions to stabilise inflation therefore plays a crucial role in ensuring this confidence. Indeed, central banks have stepped up their efforts to make their analyses more accessible and better explain their actions in favour of price stability. The ECB, for example, has developed content to explain its actions designed specifically for the general public. The Banque de France, for its part, has also sought to communicate more directly with different audiences, using a variety of media including TV, radio and social networks. This podcast is also, of course, an example of these actions.

# **VINCENT BIGNON**

Everyone can access these podcasts via our website or our Youtube channel. Thank you Erwan for your contributions, and join us again soon for another Dialogue &co.

#### **ERWAN GAUTIER**

Thank you Vincent and thank you all for listening.

# **VOICE-OVER**

Many thanks to Erwan Gautier for his participation in this episode. If you would like to find out more, you will find links to research articles in the episode description. On your listening platforms, don't hesitate to subscribe to Dialogue &co, and leave comments and stars. Join us again soon for another economic dialogue with experts at the Banque de France.